

Title (en)

FRICION STIR WELDING TOOL, AND MACHINE TOOL

Title (de)

REIBRÜHRSCHEISSWERKZEUG UND WERKZEUGMASCHINE

Title (fr)

OUTIL POUR SOUDAGE PAR FRICTION-MALAXAGE ET MACHINE-OUTIL

Publication

EP 4026646 B1 20240508 (EN)

Application

EP 19948460 A 20191008

Priority

JP 2019039587 W 20191008

Abstract (en)

[origin: EP4026646A1] A stir pin includes: a base end portion holdable by a pin holder; a stirring portion rotatable about a first axis relative to a shoulder member; and an intermediate portion provided between the base end portion and the stirring portion and rotatable about the first axis together with the stirring portion. The intermediate portion includes a first portion and a second portion that is provided further in a first direction than the first portion. The first direction is defined as a direction from the base end portion toward the stirring portion. The first portion includes a protrusion protruding beyond an outer surface of the second portion in a direction away from the first axis. The protrusion has a surface that is pointed in the first direction and defines a ring-shaped receiving surface that receives a material waste generated as a result of a friction stirring.

IPC 8 full level

B23K 20/12 (2006.01)

CPC (source: EP US)

B23K 20/1255 (2013.01 - EP US); **B23K 20/126** (2013.01 - US); **B23K 20/26** (2013.01 - US)

Citation (examination)

- CN 206382700 U 20170808 - AVIC BEIJING AERONAUTICAL MANUFACTURING TECH RESEARCH INSTITUTE
- JP 2012020288 A 20120202 - NIPPON LIGHT METAL CO
- WO 2019123678 A1 20190627 - NIPPON LIGHT METAL CO [JP]

Designated contracting state (EPC)

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DOCDB simple family (publication)

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